# **The Hazardous Material Squad**

## The Robotics Activity

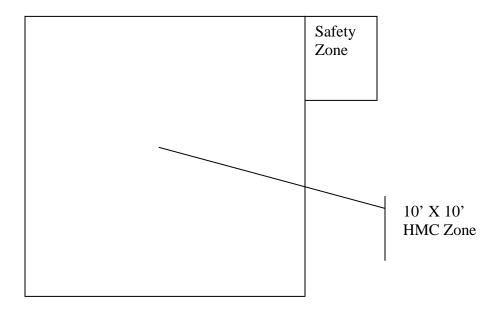
• Project: Design a robot that will pick up 4 difference Hazardous Material Containers (HMC) (raw eggs) and transport them to a safety zone. The HMCs will each be positioned in a unique way.

#### Restrictions

- o The robot can not be bigger than a 20" x 20" x 20".
- o The robot must be wireless remote controlled.
- o The robot must carry its own power supply.
- o The HMCs must be transported to the safety zone in less than 10 minutes
- o Safe work habits must be followed in every aspect of this project.

## • Challenge Parameters

- o The HMC area will be 10' x 10'.
  - One HMC will be open out on the ground
  - One HMC will be on top of a block 6" tall.
  - One HMC will be behind a 12" bock
  - One HMC will be under a 6" ceiling.



# **Challenge Criteria Rubric**

	3	2	1	Disqualified	Results
The robot can not be bigger than a 20" x 20" x 20	Meets the measurement criteria			Does not meet the measurement criteria	
The robot must be wireless remote controlled (RC).	Meets the wireless RC criteria			Does not meet the wireless RC criteria	
The robot must carry its own power supply	Meets the power supply criteria			Does not meet the power supply criteria	
HMC Spills (creaked or broken eggs)	No HMC Spills	One HMC Spill	Two HMC Spills	More than two HMC Spills	
Time laps	Fastest time	With in the 10 minute time limit		Out side the 10 minute time limit	
				Total Points Earned	

**If there is a tie** in the top scores the least amount of spills will take first place. If there is still a tie the fasted time will take first place.